

Claims

- [c1] 1. An edge module for a modular plastic conveyor belt, the edge module comprising:
- a module body extending longitudinally from a first end to a second end, laterally from an inside edge to an outside edge, and in thickness from a top side to a bottom side, the module body including:
 - a first set of hinge eyes spaced apart along the first end and forming rod holes aligned laterally to define a first rod passageway;
 - a second set of hinge eyes spaced apart along the second end and forming rod holes aligned laterally to define a second rod passageway;
 - outside edge structure defining an opening near the outside edge of the module body intersecting the first rod passageway and including a post formed in the opening;
 - a hook-shaped rod retention member received in the opening and including:
 - a bend;
 - a shank extending from the bend and terminating

in a head;

wherein the post is nestled in the bend and the head is movable from a first position at least partly occluding the first rod passageway and a second position generally clear of the first rod passageway.

- [c2] 2. An edge module as in claim 1 wherein the bend includes a protrusion at an end opposite the shank, the protrusion engaging the post to attach the hook-shaped rod retention member to the post.
- [c3] 3. An edge module as in claim 1 wherein the shank is bent to move the head to the second position.
- [c4] 4. An edge module as in claim 1 wherein the post extends laterally across the opening.
- [c5] 5. An edge module as in claim 1 wherein the head in the second position is nearer the top side of the module body than the head in the first position.
- [c6] 6. An edge module as in claim wherein the head includes a contoured face facing the outside edge of the module.
- [c7] 7. An edge module as in claim 6 wherein the contoured face is angled relative to the first rod passageway.
- [c8] 8. An edge module as in claim 1 wherein the head includes a wall facing the first passageway and forming a

concave depression that is aligned with the passageway when the head is in the first position.

[c9] 9. An edge module as in claim 1 further including engagement structure on the shank accessible from the top side of the module body by fingers or a tool for clipping the hook-shaped rod retention member to the post.

[c10] 10. An edge module as in claim 1 wherein the head is laterally wider than the rest of the shank.

[c11] 11. An edge module for a modular plastic conveyor belt, the edge module comprising:

- a module body extending longitudinally from a first end to a second end, laterally from an inside edge to an outside edge, and in thickness from a top side to a bottom side, the module body including:

- a first set of hinge eyes spaced apart along the first end and forming rod holes aligned laterally to define a first rod passageway;

- a second set of hinge eyes spaced apart along the second end and forming rod holes aligned laterally to define a second rod passageway;

- outside edge structure defining an opening near the outside edge of the module body intersecting the first rod passageway and including attachment

structure in the opening;
a rod retention member retained in the opening by the attachment structure, the rod retention member including:
a flexible shank retained at one end by the attachment structure;
a head at the opposite end and movable from a first position at least partly blocking the first passageway to a second position not blocking the first passageway by flexing the shank.

[c12] 12. An edge module as in claim 11 wherein the attachment structure includes a lateral post traversing the opening.

[c13] 13. An edge module as in claim 11 wherein the rod retention member includes a clip at the end of the shank opposite the head that clips onto the attachment structure.

[c14] 14. An edge module as in claim 11 wherein the rod retention member is hook-shaped.

[c15] 15. An edge module as in claim 11 wherein the head in the second position is nearer the top side of the module body than the head in the first position.

- [c16] 16. An edge module as in claim 11 wherein the head includes a contoured face facing the outside edge of the module.
- [c17] 17. An edge module as in claim 16 wherein the contoured face is angled relative to the first rod passageway.
- [c18] 18. An edge module as in claim 11 wherein the head includes a wall facing the first passageway and forming a concave depression that is aligned with the passageway when the head is in the first position.
- [c19] 19. An edge module as in claim 11 further including engagement structure on the shank accessible from the top side of the module body by fingers or a tool for clipping the hook-shaped rod retention member to the post.
- [c20] 20. An edge module as in claim 11 wherein the head is laterally wider than the rest of the shank.
- [c21] 21. An edge module for a modular plastic conveyor belt, the edge module comprising:
a module body extending longitudinally from a first end to a second end, laterally from an inside edge to an outside edge, and in thickness from a top side to a bottom side, the module body including:
a first set of hinge eyes spaced apart along the first end and forming rod holes aligned laterally to de-

fine a first rod passageway;
a second set of hinge eyes spaced apart along the second end and forming rod holes aligned laterally to define a second rod passageway;
outside edge structure defining an opening near the outside edge of the module body intersecting the first rod passageway and including attachment structure in the opening;
a rod retention member retained in the opening by the attachment structure, the rod retention member including:
a plastic band terminating in a head at one end and forming a clip at an opposite end clipping the rod retention member to the attachment structure.

[c22] 22. An edge module as in claim 21 wherein the plastic band is hook-shaped.

[c23] 23. An edge module as in claim 21 wherein the attachment structure includes a lateral post traversing the opening.

[c24] 24. An edge module as in claim 23 wherein the clip clips to the post.

[c25] 25. An edge module as in claim 21 wherein the plastic

band includes a shank between the head and the clip.

- [c26] 26. An edge module as in claim 25 wherein the head is in a blocking position at least partly occluding the first rod passageway when the shank is unflexed and wherein the shank is flexed to move the head to an unblocking position generally clear of the first rod passageway.
- [c27] 27. An edge module as in claim 26 wherein the head in the unblocking position is nearer the top side of the module body than the head in the blocking position.
- [c28] 28. An edge module as in claim 21 wherein the head includes a contoured face facing the outside edge of the module.
- [c29] 29. An edge module as in claim 28 wherein the contoured face is angled relative to the first rod passageway.
- [c30] 30. An edge module as in claim 21 wherein the head includes a wall facing the first passageway and forming a concave depression that is aligned with the passageway when the head is in a blocking position intersecting the first rod passageway.
- [c31] 31. An edge module as in claim 21 further including engagement structure on the shank accessible from the top side of the module body by fingers or a tool for clipping

the rod retention member to the attachment structure.

[c32] 32. An edge module as in claim 21 wherein the head is laterally wider than the rest of the plastic band.

[c33] 33. An edge module as in claim 21 wherein the clip is a U-shaped bend in the plastic band.

[c34] 34. A hook-shaped rod retention clip for retaining hinge rods in conveyor belts, the rod retention clip comprising:
a U-shaped bend having a catch at one end to form a clip for attaching to conveyor belt structure;
a flexible shank extending from the opposite second end of the bend and terminating in an enlarged head for retaining hinge rods in plastic conveyor belts.